

IVANITSKAYA, O.S.; LEVASHEV, A.Ye.

On accelerated motions in a nonreduced (optical) reference system.
Trudy FTI AN Uz SSR 3:103-110 '50. (MIRA 11:4)
(Light--Speed) (Field theory) (Relativity (Physics))

IVANITSKAYA, O.S. [Ivanits'ka, O.S.]; LEVASHEV, A.Ye. [Levashev, A.IE.

Affinity between classical and relativistic dynamics, Newtonian
approximation. Nauk povid. KDU no.1:5-6 '56. (MIRA 11:4)
(Relativity (Physics)
(Dynamics)

IVANITSKAYA, O.S. [Ivanits'ka, O.S.]

Spacelike hypersurfaces in relativistic dynamics. Nauk povid. KDU
no.1:7-8 '56. (MIRA 11:4)
(Relativity (Physics))
(Dynamics)

IVANITSKAYA, O.S. [Ivanits'ka, O.S.]; LEVASHEV, A.Ye. [Levashov, A.IE.]

First-order observations pertaining to the theory of relativity.
Nauk povid. KDU no.1:10-11 '56. (MIRA 11:4)
(Relativity (Physics)) (Electrodynamics)

S/058/61/000/010/001/100
A001/A101

AUTHOR: Ivanitskaya, O. S.

TITLE: The generalized equivalent potential and sequence of infinitesimal Lorentz contractions at rotational motion

PERIODICAL: Referativnyy zhurnal. Fizika, no. 10, 1961, 10, abstract 10A119
(v sb. "Probl. sovrem. teorii elementarn. chastits", no. 2, Uzhgorod,
1959, 44-51)

TEXT: The author considers the possibility of replacing dynamical mass by some equivalent potential. It is assumed that the possibility of such a replacement points to the existence of a sequence of infinitesimal Lorentz contractions, being the functions of coordinates, which is equivalent to the sequence of infinitesimal Lorentz contractions, being the functions of velocity, leading to origination of dynamical mass. Moreover, it is supposed that also other relativistic corrections, besides those entering the equivalent potential, are a result of the equivalent sequence of infinitesimal Lorentz contractions. This sequence is derived on the basis of general properties of the matrix of infinitesimal Lorentz contraction, information on the nature of symmetry of field and motion,

Card 1/2

S/058/61/000/010/001/100
A001/A101

The generalized equivalent potential ...

and some other particular conditions. The motion equations of the special relativity theory are not made use of. An equation is written down from which equivalent sequence is determined. However, the single-valued determination of this sequence from the equation can be carried out only with addition of certain conditions mentioned above. Coefficients of the sequence of infinitesimal Lorentz contractions are calculated for the case of uniform rotation of a particle in a central field. The method described by the author is used for the analysis of Thomas precession and effect of variation of the life time of unstable particles in dependence on their velocity. A relation is established between equivalent sequence of Lorentz contractions and equivalent potential.

A. Temkin

[Abstracter's note: Complete translation]



Card 2/2

IVANYTS'KA, O. S.

S/058/63/000/001/037/120
A062/A101

AUTHOR: Ivanyts'ka, O. S.

TITLE: Connection of the generalized equivalent potential with the geometric invariants

PERIODICAL: Referativnyy zhurnal, Fizika, no. 1, 1963, 10, abstract 1864 ("Nauk. zap. Kyivs'k. un-t", 1959, v.18, no. 3, 223 - 231, Ukrainian; summary in Russian)

TEXT: When solving problems of the special relativity theory, the equivalent potential is sometimes introduced instead of the dynamic mass. This change is implicitly accompanied by a transition from infinitely small Lorentz transformations (functions of instantaneous velocities) to infinitely small transformations - functions of the coordinates. The article looks for these transformations and equations for the equivalent potential. To find infinitely small changes of the auxiliary unit vector, connected to the particle and caused by the acceleration of the particle, a parallel transfer is determined whose parameters are coefficients of an affine connection $\Gamma^\nu_{\mu\nu}$. There is considered a

Card 1/2

S/058/63/000/001/037/120
A062/A101

Connection of the generalized equivalent potential...

particle rotating in a plane with a variable angular velocity around an electrostatic center. It is shown for this case that the geometric invariant $R = g^{1/4} R_{\alpha\mu\nu}^{\mu} = 0$ is an equation for the generalized equivalent potential.

Yu. K. ✓

[Abstracter's note: Complete translation]

Card 2/2

BOGORODSKIY, A.F.; IVANITSKAYA, O.S., kand. fiz.-mat. nauk, otd. red.;
NIKONCVA, R.S., red.

[Einstein's field equations and their use in astronomy] Urav-
neniya polia Einshtaina i ikh primenenie v astronomii. Kiev,
Izd-vo Kievskogo univ., 1962. 195 p. (MIRA 16:1)
(Gravitation) (Cosmology) (Relativity (Physics))

L 16609-63

EWT(1)/FCC(w)/BDS AFFTC/ASD/IJP(C)

S/250/63/007/004/003/C05

55

AUTHOR: Levashev, A. Ye. and Ivanitskaya, O. S.

TITLE: Two approaches to the covariant description of elementary particles fields.

PERIODICAL: Akademiya Nauk BSSR. Doklady. v. 7, no. 4, 1963, 235-236

TEXT: The authors consider whether it is possible to formulate a new approach to the covariant description of the fields of elementary particles that would not presuppose specific non-Galilean coordinates, but would operate with Galilean coordinates of local (contacting) spaces. It is shown by means of mathematical formulas that this approach ensues naturally from the theory of asymmetrical Lorentz connectedness, as a generalized tetradic formulation of the general theory of relativity. The most important English-language reference reads as follows: E. P. Wigner, Rev. Mod. Phys. 29, 255, 1957. There are 16 equations.

ASSOCIATION: Belorussskiy gosudarstvennyy universitet imeni V. I. Lenina
(Belorussian State University imeni V. I. Lenin)

SUBMITTED: June 18, 1962
Card 1/1

L 14370-63

EWT(1)/FCC(w)/BDS AFFTC/ASD/ESD-3 IJP(C)

ACCESSION NR: AP3001823

P/0045/63/023/005/0647/0653

AUTHOR: Levashev, A. E.; Ivanitskaya, O. S. (S) *57*
56

TITLE: Generalized tetrad formulation of the general relativity theory

SOURCE: Acta physica polonica, v. 23, no. 5, 1963, 647-653

TOPIC TAGS: tetrad formulation, coordinate tetrad, tetrad component, gravitational potential, field equation, equation of motion, transformation of physical tetrad, general relativity

ABSTRACT: Einstein's use of non-Galileian coordinates x^u causes considerable difficulty. The authors replace these by the field of x^m -systems, through utilization of generalized transformation of the physical tetrads during parallel displacement in X^4 from point to point, leading to generalization of the connection of the tangent Minkowski spaces described in tetrad formulation by means of Ricci rotation coefficients. Hence this variant is naturally called "generalized tetrad formulation of the G.R.T." In each E^4 we can transform x^m -coordinates to any arbitrary curvilinear or Galileian x^m' prime coordinates. A comparison is given between two variants of tetrad formulation of the G.R.T.

Card 1/2 / ASSOCIATION: Belorussian State University, Minsk, Belorussian SSR

IVANITSKAYA, O.S.

Total covariance in the theory of Lorentz connectivity. Dokl. AN
BSSR 8 no.12:776-778 D '64. (MIRA 18:4)

1. Institut fiziki AN BSSR.

IVANITSKAYA, O.S.

Local invariance and the generalization of inhomogeneous Lorentz
transformations. Dokl. AN BSSR 9 no.2:88-90 F '65.
(MIRA 18:5)

1. Institut fiziki AN BSSR.

AUTHORS: Levashev, A. Ye.; Ivanitskaya, O. S.

Lorentz connectivity in a gravitational field as a
problem of the theory of gravitation

tion but also deformation. A general formulation of the theory is given. Ya. Pugachev.

MR CODE: GP

ENCL: CC

L 45380-66 EWT(1)/EWP(m)/T IJP(c) GW
ACC NR: AR6016596 SOURCE CODE: UR/0044/65/000/012/A087/A087

33

B

AUTHORS: Levashev, A. Ye.; Ivanitskaya, O. S.

TITLE: Theory of asymmetric Lorentz connectedness in a gravitational field as generalized tetrad formulation of attraction theory

SOURCE: Ref. zh. Matematika, Abs. 12A562

REF SOURCE: Uch. zap. Kazansk. un-t, v. 123, no. 2, 1963, 39-60

TOPIC TAGS: gravitation field, general relativity theory

ABSTRACT: The authors present the basic ideas for a new approach to the theory of attraction with use of tetrad formalism. In the first section they introduce the tetrad connected with a curvilinear system of coordinates, consider infinitely small transformation of tetrads and their partitions, describing on the one hand deformation, on the other hand, rotation of the tetrad. Further, the authors construct a theory of asymmetric Lorentz connectedness corresponding to the gravitational field. From the generalized tetrad formulation of the general theory of relativity the Einstein equations as equations for g^{44} fall out and the role of potentials must be played by a quantity whose determination and justification is dealt with by the fifth and sixth sections of this paper. The last section contains a comparison of the tetrad and generalized tetrad formulations of the theory of attraction and also a remark on Petrov classification in tetrad formulations of the theory of attraction. V. Kaygorodov [Translation of abstract]

Card 1/1

SUB CODE: 20

a.m.w

UDC: 513:53

APPROVED FOR RELEASE 08/10/2001

CIA-RDP86-00513R000619010007-7"

AKOL'ZIN, L.Ye.; BEDILO, V.Ye.; BOROZDOV, I.A.; VINARSKIY, I.S.;
GOLOVATYUK, S.A.; NIKOLAYEV, G.P. Prinimali uchastiye:
DATSUN, N.V.; ZHEGOV, V.T.; IVANITSKAYA, S.Yu.; KOMISSAROV,
M.A.; KALINCHUK, I.G.; LISHBERGOV, V.D.; SEREBRKNNIKOVA, S.O.;
FILIN, V.D. DUGIN, Ye.V., otv.red.; DUKALOV, M.F., red.;
BUBIR', V.A., red.; TYUTYUNIK, Ya.I., red.; VARSHAVSKIY, I.N.,
red.; MOHIN, M.I., red.; PANCHENKO, A.I., red.; BELYAYEV, F.R.,
red.; RABINKOVA, L.K., red.izd-vs; BOLDYREVA, Z.L., tekhn.red.

[Types of mine cross section] Tipovye secheniya gornykh vyrabotok. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu. Vol.5. [Cross section of mines with reinforced-concrete supports and hinge-hung crossbars for 1-, 2- and 3-ton railroad cars] Secheniya vyrabotok, zakreplennykh zhelezobetonnymi stoikami s sharnirno-podvesnym vekhniakom, dlia 1-, 2- i 3-tonnykh vagonetok. 1960. 411 p. (MIRA 13:12)

1. Khar'kov. Gosudarstvennyy proyektnyy institut Yuzhgiproshchekht.
(Mine timbering)

IVANITSKAYA, V.I. (Khar'kov, 1, ul. Kotlova, d.68)

Interscapulothoracic amputation. Nov.khir.arkh. no.4:59-62
'62. (MIRA 15:5)

1. Khirurgicheskoye otdeleniye (zav. - kand.med.nauk T.P.
Sibbotina) Khar'kovskogo instituta meditsinskoy radiologii.
(AMPUTATION OF ARM)

IVANILSKAYA, Val.

Compound treatment of thyroid cancer with I^{131} , Med. rad. 9 no.8
3-9 Ag 164 .
(MIRA 18±4)

1. Khar'kovskiy institut meditsinskoy radiologii.

IVANITSKAYA, V.P.; NEMTSOVA, L.G., red.; SHCHEPTEVA, T.A., tekhn.red.

[General theory of surfaces of the second order; textbook on analytic geometry for the correspondence department of pedagogical institutes] Obshchaya teoriya poverkhnostei vtorogo poriadka; uchebnoe posobie po analiticheskoi geometrii dlia zaochnogo otdeleniya pedagogicheskikh institutov. Moskva, Gos.uchebno-pedagog.izd-vo M-va prosv.RSFSR, 1958. 122 p.

(MIRA 12:9)

(Surfaces)

Ivanitskaya, Valentina Pavlovna

PHASE I BOOK EXPLOITATION 795

Bakhvalov, Sergey Vladimirovich; Babushkin, Lev Ivanovich, and
Ivanitskaya, Valentina Pavlovna

Analiticheskaya geometriya; uchebnik dlya pedagogicheskikh
institutov (Analytic Geometry; a Textbook for Pedagogical
Institutes) Moscow, Uchpedgiz, 1958. 326 p. 25,000 copies printed.

Ed. (title page): Bakhvalova, S.V.; Ed. (inside book): Ostianu, N.M.;
Tech. Ed.: Natanov, M.I.

PURPOSE: This book is approved by the Ministry of Education of
the RSFSR as a textbook for students at pedagogical institutes,
although certain problems exceed the requirements of such
a course.

COVERAGE: The book is a text for a classical course in plane and
solid analytic geometry. The book deals with basic elements of
analytic geometry. More extensive theories of conics and of

Card 1/13

Analytic Geometry (Cont.)

795

quadric surfaces are presented. Fundamentals of vector algebra are given, which are applied to certain problems of the theory of a straight line and to coordinate transformations. Although there is no presentation of equations in vector form, certain equations in Cartesian coordinates are derived with the aid of vector algebra. No personalities are mentioned. There are 6 Soviet references.

TABLE OF CONTENTS:

Preface

3

Introduction

4

PART 1. STRAIGHT-LINE AND PLANE ANALYTIC GEOMETRY

Ch. I. Straight-line Geometry

5

1. Ray. Direction of a ray [Directed line]
2. Determination of the position of a point on a straight line with the aid of coordinates

6

Card 2/ 13

Analytic Geometry (Cont.)

795

3. Length of a segment and geometrical meaning of the sign of the difference of two-point coordinates	6
4. Division of a segment in a given ratio	8
Ch. II. Coordinate Method on a Plane	9
5. Rectangular Cartesian coordinates	11
6. Distance between two points	12
7. Division of a segment in a given ratio	14
8. Polar coordinates of a point	16
9. Relations between polar and rectangular coordinates of a point	17
10. Generalized polar coordinates	
11. Geometrical interpretation of an equation with two variables. Imaginary elements. Classification of lines.	18
12. Line as locus of points. Formation of an equation	26

Card 3/13

795

Analytic Geometry (Cont.)

Ch. III. Elements of Vector Algebra	
13. Same direction of two plane rays. Vector. Equality of vectors	32
14. Addition of vectors	34
15. Subtraction of vectors	36
16. Vector times scalar (number)	36
17. Resolution of a vector into two noncollinear directions	39
18. Affine coordinates. Coordinates of a point, coordinates of a vector	40
19. Problems on vectors with coordinates in orthogonal Cartesian coordinate system	43
20. Area of a triangle	47
Ch. IV. Straight Line	
21. Various methods for determination of the position of a straight line	49
22. Straight-line equations in orthogonal Cartesian coordinates	49
23. Conditions under which two linear equations represent the same straight line	50
24. Conditions under which two straight lines are parallel or perpendicular	51

Card 4/13

APPROVED FOR

Analytic Geometry (Cont.)	795
35. Angle of two straight lines in orthogonal coordinate system	63
36. Concept of a nomogram of adjusted points	66
Ch. V. The Study of Conics From Their Canonic Equations	
37. Problems which reduce to conics	69
38. The circle	73
39. Ellipse. Canonic equation. Determination of the forms of ellipse from canonic equations	75
40. Ellipse as a result of uniform compression of a circle in the direction of a diameter	81
41. Parametric equation of an ellipse	82
42. Hyperbola. Canonic equation. Asymptotes. Determination of the form of a hyperbola from canonic equation	84
43. Parabola. Canonic equations. Determination of the form of a parabola from canonic equation	91
44. Diameters of conics	95
45. Tangents to conics	101
46. Directrices of conics	106
47. Equation of conics in polar coordinates	110
48. Conics as plane sections of [right circular] cone surface	114

Card 6/13

Analytic Geometry (Cont.)

795

Ch. VI. Transformation of Coordinate System	
49. Transformation of one affine coordinate system into another. Translation of axes. Transformation of a rectangular coordinate system into another rectangular system [Rotation of axes]	118
Ch. VII. General Theory of Conics	121
50. General form of conic equation	128
51. Reduction of general conic equation into equation with term x y missing	133
52. Further simplification of a general conic equation	143
53. Invariants of an equation after rotation of axis	
54. Transformation by translation of axes and invariants of an equation	148
55. Invariants of a general conic equation after general transformation	150
56. Determination of the coefficients of reduced conic equations with the aid of invariants	151
57. Determination of the type of conics by invariants	154

Card 7/13

Analytic Geometry (Cont.) 795

58. The center of a conic	160
59. Determination of the location of central conic	162
60. Intersection of a conic with a straight line	163
61. Classification of a conic based on asymptotic directions	167
62. Diameters of a conic	168
63. Axes of a conic	170
64. Asymptotes of a conic	172
65. Tangent to a conic	174
66. Method of determining location of central conic	176
67. Determination of location of parabola	179
68. Construction of pair of parallel straight lines	181

PART 2. SOLID ANALYTIC GEOMETRY

Ch. I. The Method of Coordinates in Space	182
1. Affine coordinates in space. Coordinate of a point	
Ch. II. Elements of Vector Algebra	184
2. Projecting vector on axis parallel to a given plane	
3. Resolution of a vector into three noncoplanar vectors.	
Coordinates of a vector and their properties	186

Card 8/13

Analytic Geometry (Cont.)

795

4. Scalar product of two vectors	189
5. Vector product and its properties	194
6. Products of three vectors. Scalar triple product. Vector triple product	198
Ch. III. Geometrical Meaning of One Equation and of a System of Two Equations With Three Variables	202
7. Equation of a surface	205
8. Equation of a line	
Ch. IV. The Plane and the Straight Line	206
9. General equation of a plane	207
10. Analysis of the general equation of a plane	
11. Geometrical meaning of sign of the expression $Ax_1 + By_1 + Cz_1 + D$	210
12. Normal form of the equation of a plane	211
13. The equation of a plane passing through three given points	213

Card 9/13

Analytic Geometry (Cont.)

795

14. Relative positions of two planes	214
15. Angle between two planes. Conditions where two planes are parallel or perpendicular	215 216
16. Relative position of three planes	217
17. Pencil of planes	219
18. Parametric equation of a straight line	219
19. Canonic equation of a straight line	
20. Equations of a straight line passing through two given points	220 220
21. Straight line as intersection of two planes	
22. Reduction of the equations of a straight line to parametric form	220 222
23. Angle between two straight lines	
24. The perpendicular distance from a point to a straight line	223 224
25. The shortest distance between two straight lines	224
26. Angle between a straight line and a plane	
27. Determination of common points of straight line and plane	226
28. Conditions under which two straight lines lie in the same plane	226

Card 10/13

Analytic Geometry (Cont.)

795

Ch. V. Quadric Surfaces and Their Canonic Equations	227
29. Surfaces of revolution	229
30. Quadric surfaces of revolution	232
31. Quadric surfaces and their canonic equations	
32. Analysis of the type of quadric surfaces using plane sections of the surface	238
33. Ruled quadric surfaces	240
Ch. VI. Transformation of Coordinates	
34. Transformation of affine coordinate system into another affine coordinate system	248
35. Transformation of rectangular Cartesian coordinate system into another rectangular Cartesian coordinate system	249
36. Translation of axes	251
37. Rotation of axes around one coordinate axis	251

Card 11/13

Analytic Geometry (Cont.)

795

Ch. VII. General Theory of Quadric Surfaces	
38. Simplification of the equation of quadric surfaces by rotation of axes around the origin	252
39. Further simplification of equation of quadric surfaces	263
40. Invariants of equations of quadric surfaces after transformation of rectangular coordinates into rectangular	268
41. Determination of the coefficients of reduced equations of quadric surfaces using invariants and identification of the type of surface with the aid of invariants	274
42. Intersection of quadric surface with a straight line	284
43. Asymptotic directions. Asymptotic cone	286
44. Center of quadric surfaces	291
45. Diametral planes of quadric surfaces. Principal diametric planes	295
46. Centre of plane section. Diameters	296
47. Tangent plane to a quadric surface at a given point	298

Card 12/13

. Analytic Geometry (Cont.) 795

Appendices	
1. Method of abridged designations	300
2. Affine transformations	303
3. Equation of a conic in affine coordinates	310
4. Affine classification of quadrics	314
5. Problems for Chapter IV of Part I	317

AVAILABLE: Library of Congress

Card 13/13

LK/jmr
11-24-58

s/055/60/000/03/03/010

AUTHORS: Bakhvalov, S.V., and Ivanitskaya, V.P.

TITLE: Orientated Angles and Their Properties

PERIODICAL: Vestnik Moskovskogo universiteta. Seriya I, matematika, mehanika, 1960, No. 3, pp. 20-30

TEXT: The totality of two rays with a common origin and one of the two domains bounded by these rays is called an angle. The angle is called orientated if both rays are considered in a fixed sequence. On the base of the system of axioms of Hilbert the authors prove several properties of orientated angles defined in this manner, e.g.:

Theorem 4: Two arbitrary angles which are orientated like a third one, are equally orientated.
The authors mention P.S. Modenov, P.K. Rashevskiy and V.F. Kagan. There are 3 figures and 4 references: 3 Soviet and 1 German.

ASSOCIATION: Kafedra vysshey geometrii (Department of Higher Geometry)

SUBMITTED: June 29, 1959

✓B

Card 1/1

BAKHVALOV, S. V.; IVANITSKAYA, V. P.

Oriented angles and their characteristics. Vest. Mosk. un. Ser. 1:
Mat., mekh. 15 no. 3:20-30 My-Je '60. (MIRA 13:10)

1. Kafedra vyshej geometrii Moskovskogo universiteta.
(Angle)

BAKHVALOV, Sergey Vladimirovich; BABUSHKIN, Lev Ivanovich; IVANITSKAYA,
Valentina Pavlovna; DOLGOPOLOV, V.G., red.; SMIRNOVA, M.I.,
tekhn. red.

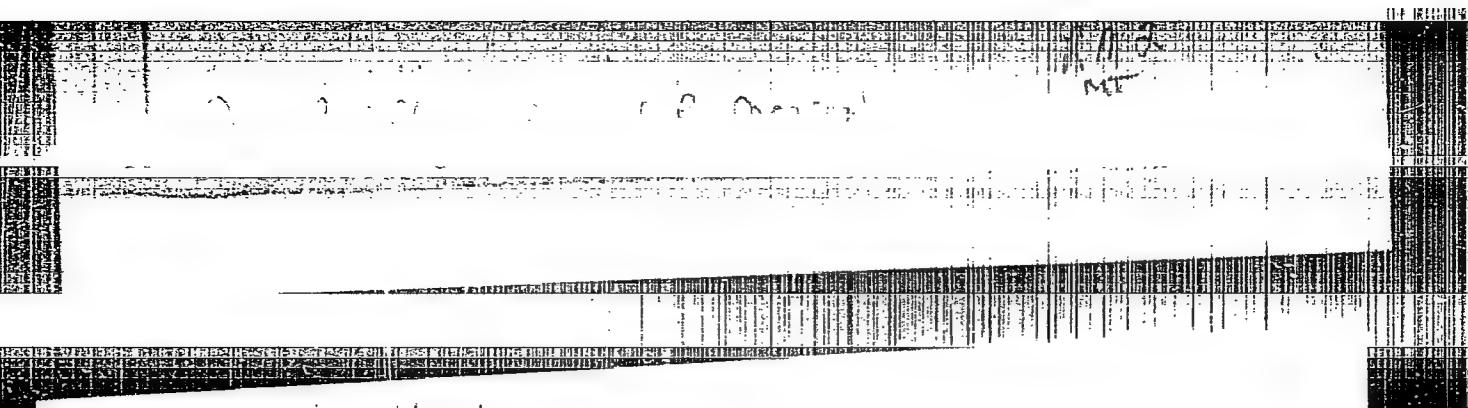
[Analytic geometry; textbook for pedagogical institutes]An-
aliticheskaya geometriya; uchebnik dlja pedagogicheskikh in-
stitutov. Pod red. S.V.Bakhvalova. Izd.2., perer. Moskva,
Uchpedgiz, 1962. 367 p. (MIRA 16:2)
(Geometry, Analytic)

BAKHVALOV, Sergey Vladimirovich; BABUSHKIN, Lev Ivanovich;
IVANITSKAYA, Valentina Pavlovna; DOLGOPOLOV, V.G., red.

[Analytic geometry; textbook for pedagogical institutes]
Analiticheskaiia geometriia; uchebnik dlja pedagogicheskikh institutov. Pod red. S.V.Bakhvalova. Izd.3. Moskva, Prosveshchenie, 1965. 367 p. (MIRA 18:12)

"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619010007-7



APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619010007-7"

POPOVA, Ye.M.; PUCHKOVA, M.G.; IVANITSKAYA, Ye.A.

Using yeast autolysates to improve the quality of bulk process
champagne. Biokhim. vin., no. 5:79-87 '57. (MIRA 10:6)

1. Institut biokhimii im. A.N. Bakha AN SSSR,
(Champagne (Wine)) (Yeast) (Autolysis)

IVANITSAYA, Ye.A., Cand Bio Sci—(disc) "Effect of ionizing radiation
upon the sorption properties of tissues in vivo." Nov, [Publishing House
of the Acad of Sci USSR], 1958. 17 pp (Acad Sci USSR. Inst of Morpho-
logy of Animals in A.S. Severtcov), 150 copies (KL,45-53, 145)

-53-

IVANITSKAYA, Ye. A. and KUZIN, A. M.

"The Influence of Ionizing Radiations on Sorbtion Ability of Tissues and Cells
in Vivo."

paper presented at the Intl. Congress on Radiation Research, Burlington, Vermont.
10-16 Aug 58.

IVANITSKAYA, E.A. and KUZIN, A.M.

"Effect of Radiation on the Sorbtion [sic] of Radioactive Colloids by the Cells,"
paper presented at Intl Congress of Radiation Research - Burlington, Vermont,
10-16 Aug 58.

Inst. of Biological Physics, Acad. Sci. USSR, Moscow

IVANITSKAYA, Ye.A.; KUZIN, A.M.; MAMUL', Ya.V.; SHABADASH, A.L.

Changes in the sorption properties of the liver following whole-body
X irradiation [with summary in English]. Biofizika 3 no.2:220-225
'58. (MIRA 11:4)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.
(LIVER) (X RAYS--PHYSIOLOGICAL EFFECT)

IVANITSKAYA, Ye.A.

Effect of ionizing radiations on the sorption properties of free
cells [with summary in English]. Biofizika 4 no.1:71-77 Ja '59.
(MIRA 12:1)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.
(ROENTGEN RAYS, effects,

on Ehrlich carcinoma & erythrocyte free cells
sorption properties (Rus))

(ERYTHROCYTES, effect of radiations,
x-rays, on sorption properties of free cells (Rus))
(NEOPLASMS, exper.

eff. of x-rays on sorption properties of free Ehrlich
carcinoma cells (Rus))

IVANITSKAYA, Ye.A.

Investigating the effect of irradiation by gamma rays and neutrons
on the concentration of free nucleotides in tissues of the animal
organism. Radiobiologija 1 no.3:336-339 '61. (MIRA 14:10)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.
(GAMMA RAYS--PHYSIOLOGICAL EFFECT)
(NEUTRONS--PHYSIOLOGICAL EFFECT) (NUCLEOTIDES)

L 1398-66 ENT(m)

ACCESSION NR: AP5017763

UR/0216/65/000/004/0507/0520

577.391

AUTHOR: Kuzin, A. M.; Plyshevskaya, Ye. G.; Kopylov, V. A.;
Ivanitskaya, Ye. A.; Lebedeva, N. Ye.; Kolomiytsaeva, I. K.;
Tokarskaya, S. K.; Mel'nikova, S. K.

34

33

13

TITLE: Role of the "orthophenol-orthoquinone" system in the
primary mechanisms of radiation effect on the organismSOURCE: AN SSSR. Izvestiya. Seriya biologicheskaya, no. 4, 1965,
507-520TOPIC TAGS: radiation biologic effect, phenol, quinone, enzyme,
desoxyribonucleic acid, tyrosine, oxidationABSTRACT: A hypothesis stating that the oxidation reaction of
orthophenols in response to high energy irradiation is closely
related to the formation of orthoquinones (semiquinones) has evolved
from the experimental work of the laboratory with which the authors
are associated. In the present study the immediate effects of
X-irradiation on enzyme process rates were investigated in a
tyrosine+tyrosinase model system under strictly controlled conditions

Card 1/3

L 1398-66
ACCESSION NR: AP5017763

(210 kv, 15 ma, no filter, 100 to 1000 r doses, 10 min incubation). Change in enzyme process rate was determined by the concentration of newly formed orthophenols and orthoquinones. With irradiation of the whole system, the concentration was 5 times higher than for controls. Irradiation of only the tyrosine solution led to a lesser concentration, and the concentration decreased still further with irradiation of only the tyrosinase. When the irradiated mixture was incubated with a suspension of mouse thymus nuclei, the tyrosine oxidation products (orthoquinones) were completely absorbed by the nuclei. Fluorescence tests with acridine-orange on thymus nuclei of mice immediately after irradiation and tests on thymus nuclei treated with tyrosine oxidation products demonstrated the similarity of irradiation effect and orthoquinone effect. The same effect was demonstrated with quinone extracts from gamma-irradiated plant tissue (potato). Treatment of carbon-labeled plant sprouts with extracts from irradiated plants depressed DNA synthesis by 50 to 60%, the same as after gamma-irradiation. Injection of purified orthoquinones, extracted from irradiated plant tissues, into young mice caused loss of weight, growth inhibition, and a sharp decrease in leukocyte level of the peripheral blood. These study data demonstrate the importance of the

Card 2/3

L 1398-66
ACCESSION NR: AP5017763

"orthophenol-orthoquinone system" in the primary mechanisms of radiation effect. Orig. art. has: 10 figures and 4 tables.

ASSOCIATION: Institut biologicheskiy fiziki AN SSSR (Institute of Biophysics AN SSSR)

SUBMITTED: 22Jan65

ENCL: 00

SUB CODE: LS

NR REF SOV: 021

OTHER: 010

Card 3/3

L 25811-66 EWT(1)/EWT(m)/T JK
ACC NR: AP6015925

SOURCE CODE: UR/0216/65/000/004/0507/0520

AUTHOR: Kuzin, A. M.; Plyshevskaya, Ye. G.; Plyshevskaya, E. G.; Kopylov, V. A.;
Ivanitskaya, Ye. A.; Ivanitzkaya, E. A.; Lebedeva, N. Ye.; Lebedeva, N. E.;
Kolomiytseva, I. K.; Kolomiytzeva, I. I.; Mel'nikova, S. K.; Melnikova, S. K.;
Tokarskaya, V. I.

ORG: Institute of Biophysics, AN SSSR, Moscow (Institut biologicheskoy fiziki AN SSSR)

TITLE: Function of the orthophenol-orthoquinone system in the early mechanism of
action of ionizing radiation on the organism

SOURCE: AN SSSR. Izvestiya. ¹⁹ Seriya biologicheskaya, no. 4, 1965, 507-520

TOPIC TAGS: ionizing radiation, radiation biologic effect, radiation plant effect,
tyrosine, sorption, oxidation, DNA, biosynthesis, radiation sickness

ABSTRACT: The authors concluded from a variety of experiments on plants
and animals that the initial processes in the irradiated organism develop
in the following sequence:

(1) During irradiation the formation of active radicals causes very
slight radiochemical oxidation of the phenols present in the cell, chiefly
tyrosine.

(2) The resultant oxidation products activate tyrosinase, which
immediately after irradiation leads to the formation of large quantities of
biologically active orthoquinones.

(3) The resultant orthoquinones are actively sorbed by the cell nuclei.

UDC: 577.391

Card 1/2

L 25811-65

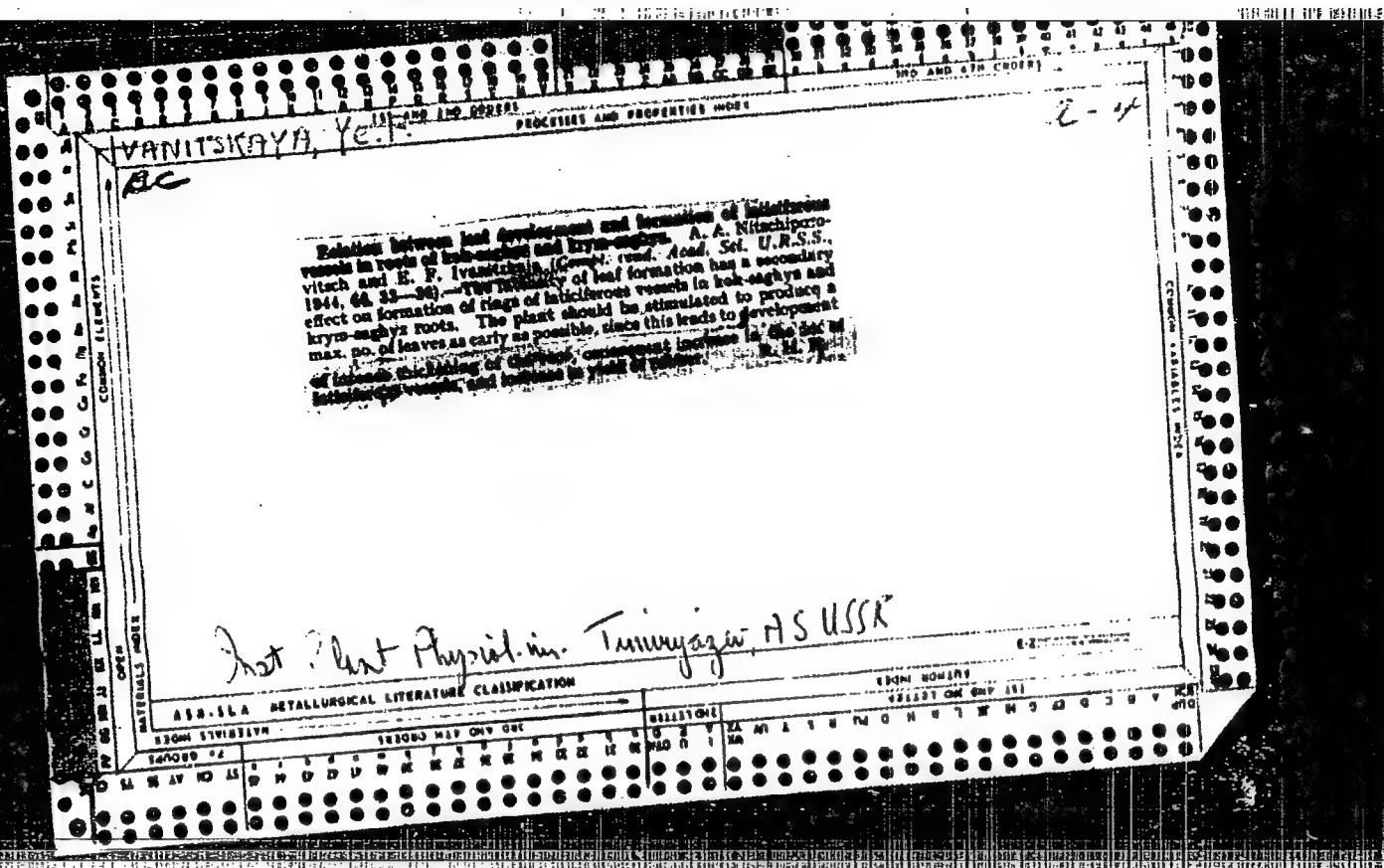
ACC NR: AP6015925

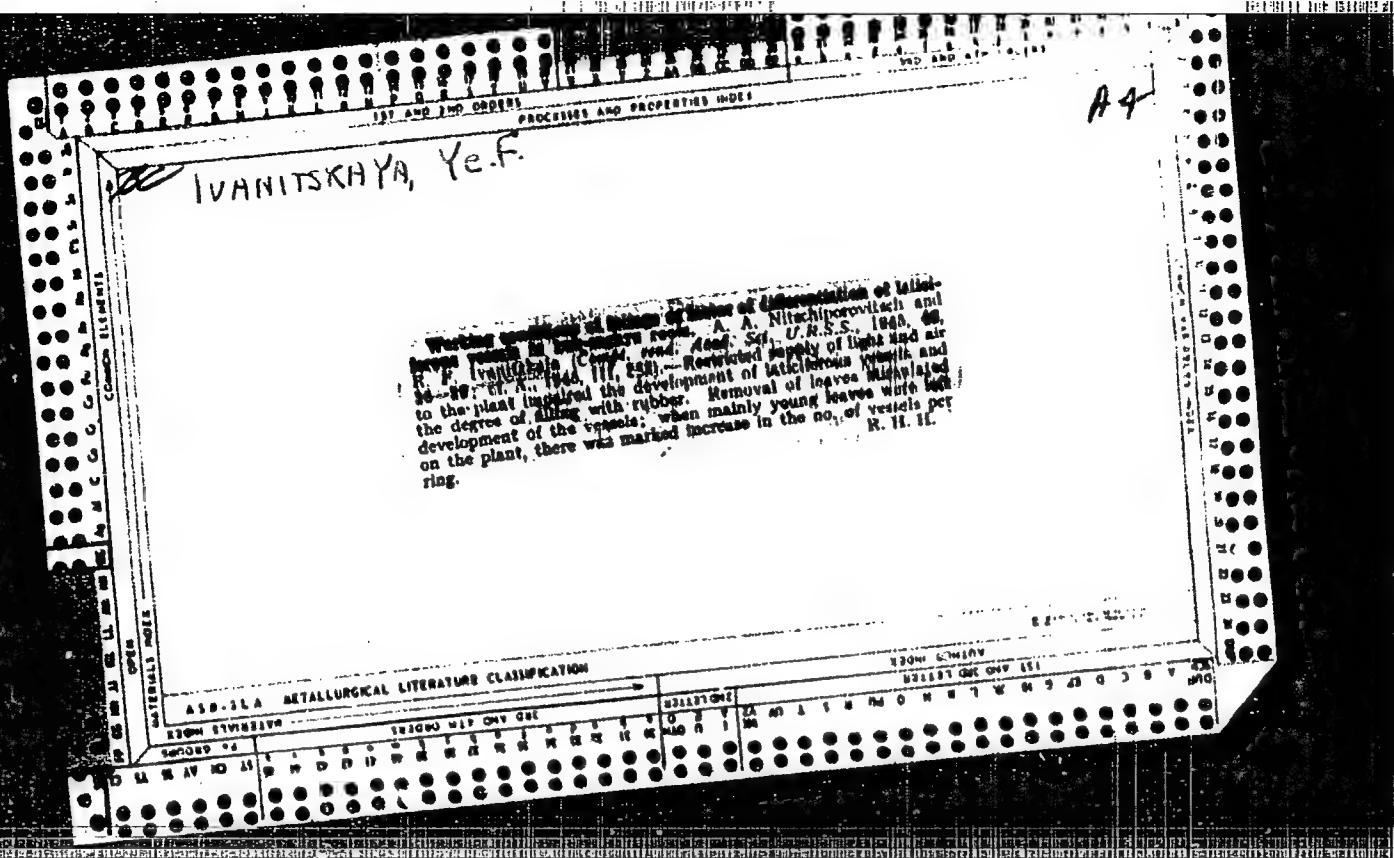
(4) The orthoquinones sorbed by the nuclei inhibit DNA synthesis, block the incorporation of thymidine into newly synthesized DNA, and alter their fluorescence in the presence of acridine orange.

(5) The blocking of nuclear DNA by the orthoquinones sharply inhibits cell division, giving rise to leukopenia, arrested growth, weight loss, chromosomal aberrations, and, in sufficiently high concentrations, death of the organism. Orig. art. has: 10 figures and 4 tables. [JPRS]

SUB CODE: 06, 07 / SUBM DATE: 22Jan65 / ORIG REF: 021 / OTH REF: 010

Card 2/2 CC





IVANITSKAYA, Ye.F.

STROGOV, B.P.; KLESHNIN, A.F.; IVANITSKAYA, Ye.F.; OPARIN, A.I., akademik.

Temperature of cotton plant leaves at various types of soil salt accumulation
and under the conditions of various water supply. Dokl.AN SSSR 93 no.1:179-
182 N '53. (MIRA 6:10)

1. Akademiya nauk SSSR (for Oparin). 2. Institut fiziologii rasteniy im.
K.A.Timiryazeva Akademii nauk SSSR (for Strogonov, Kleshnin and Ivanitskaya).
(Cotton)

IVANITSKAYA Ye.F.
STROGOV, B.P.; IVANITSKAYA, Ye.F.

Physiology of the cotton plant under conditions of different
types of salinity. Fiziol.rast. 1 no.2:164-172 N-D '54.
(MIRRA8:10)

1. Institut fiziologii rastenii imeni K.A.Timiryazeva Akademii
nauk SSSR, Moscow
(Cotton) (Plants, Effect of salts on)

Ivanitskaya, YE. F.

USSR/Agriculture - Plant physiology

Card 1/1 Pub. 22 - 45/48

Authors : Stroganov, B. P., and Ivanitskaya, E. F.

Title : Effect of soil salting on the strength of the chlorophyll bond with albumina of chlorine layers in cotton plants

Periodical : Dok. AN SSSR 98/3, 497-499, Sep 21, 1954

Abstract : The high concentration of salt in the soil and its effect on the strength of the chlorophyll bond with albumina of chlorine layers in cotton plants, was investigated and the results are described. Eight USSR references (1937-1951). Tables.

Institution : Acad. of Sc. USSR, The K. A. Timiryazev Institute of Plant Physiology

Presented by: Academician A. L. Kursanov, June 20, 1954

"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619010007-7

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619010007-7"

IVANITSKAYA, Ye. F.

Effect of anions on the cotton plant in a gravel culture. Fiziol. rast.8
no.1:67-74 '61. (MIRA 14:3)

I. K.A. Timiriazev Institute of Plant Physiology, U.S.S.R. Academy of
Sciences, Moscow.
(Plants, Effect of salts on) (Cotton)

IVANITSKAYA, YE. P.

62/49137

USSR/Medicine - Metropathy
Medicine - Radiotherapy

Jul/Aug 49

Treating Benign Diseases of the Uterus With
Domestic Preparations of Radium-Mesothorium.
Ye. P. Ivanitskaya, Can Med Sci, Cen Sci Res Inst
of Roentgenol and Radiolimeni Molotov, 2 1/3 pp

"Radium 1 Ginekol" No 4

Chief characteristic of domestic preparations is
absence of mesothorium and radium. Former is
distinguished by a more stable gamma-radiation
(RaC) than gamma-rays of radium (RaC). Employed
platinum filters (1 mm) and a rubber catheter.

62/49137

USSR/Medicine - Metropathy (Contd) Jul/Aug 49

A dose of about 1,000 mg/hr was effective in
women in the climacteric stage; lesser doses may
be effective. Of cases treated 94.7% were suc-
cessful.

62/49137

KOZLOVA, A.V., prof., IVANITSKAYA, Ye.P., doktor med.nauk

Use of radioactive gold in cancer of female genital organs [with
summary in English]. Vest.rent. i rad. 33 no.4:50-53 J1-Ag '58

1. Iz radiologicheskogo otdela (zav. - prof. A.V. Kozlova)
Gosudarstvennogo nauchno-issledovatel'skogo instituta rentgenologii
i radiologii Ministerstva zdravookhraneniya RSFSR (dir. - dots. I.G.
Lagunova).

(GENITALIA, FEMALE, neoplasms
ther., radiogold (Rus))

(GOLD, radioactive
ther. of cancer of female genitalia (Rus))

Name IVANITSKAYA-SHPINDLER, Yekaterina Petrovna
Dissertation Evolution of the Method of Radiation Therapy upon Cancer of the Cervix of the Uterus
Degree Doc Med Sci
Affiliation not Indicated
Defense Date, Place 9 Apr 56, Council of the Central Sci Res Inst of Roentgenology and Radiology
imeni Molotov
⑦²
Certification Date 29 Dec 56
Source BMVO 7/57

IVANITSKAYA, Ya.P., kand. med. nauk

Vaginal radiotherapy with hard rays in cancer of the femal sexual organs. Trudy TSentr. nauch.-issl. inst. rentg. i rad. 10:241-244 '59. (MIRA 12:9)

(GENERATIVE ORGANS, FEMALE--CANCER)
(X RAYS--THERAPEUTIC USE)

IVANITSKAYA, Ye.P., doktor med. nauk

Clinical and pathoanatomical parallels in radiant therapy of cancer
of the cervix uteri. Trudy TSentr. nauch.-issl. inst. rentg. i rad.
10:247-253 '59. (MIRA 12:9)
(UTERUS--CANCER)

IVANITSKAYA, Ye.P., doktor med. nauk

Clinical significance of the size of the dose in radiant therapy
of cancer of the cervix uteri. Trudy TSentr. nauch.-issl. inst. rentg.
1 rad. 10:254-259 '59. (MIRA 12:9)
(UTERUS--CANCER) (X RAYS--THERAPEUTIC USE)

IVANITSKAYA, Ye.P., doktor med.nauk (Moskva, 127, Bol'shoy Ovchinnikovskiy pereulok); PAVLOVA, L.I., nauchnyy sotrudnik

Clinical and radiographic examination of women within a period of five years or more, following intensive radiotherapy for cancer of the cervix uteri. Vest.rent.i rad. 35 no.1:39-42 Ja-F '60. (MIRA 13:6)

1. Iz rentgenoterapevticheskogo otdela (zav. - kand.med.nauk I.A. Pereslegin) Nauchno-issledovatel'skogo rentgeno-radiologicheskogo instituta (dir. - dotsent I.G. Legunova) Ministerstva zdravookhraneniya RSFSR.
(CERVIX NEOPLASMS radiother.)

RIMMAN, A.F., inzh.; IVANITSKAYA, Yo.P., doktor med.nauk

Protective screen for radium therapy in gynecology. Vest. rent.
i rad. 35 no. 5:66-67 S-0 '60. (MIRA 13:12)

1. Iz rentgenoterspekticheskogo otdela (zav. - starshiy nauchnyy sotrudnik I.A. Pereslegin) i laboratorii apparatov i trubok (zav. - kand.tehnicheskikh nauk V.V. Dmokhovskiy) Gosudarstvennogo nauchno-issledovatel'skogo rentgeno-radiologicheskogo instituta Ministerstva zdravookhraneniya RSFSR (dir. - prof. I.G. Lagunova).
(RADIMUM—THERAPEUTIC USE)

IVANITSKAYA, Ye. P. (Moskva)

Experimental reproduction of congenital anomalies in the development and formation of the spine. Med. rad. no.2:86-87 '62.
(MIRA 15:7)

(SPINE--ABNORMALITIES AND DEFORMITIES)
(RADIATION--PHYSIOLOGICAL EFFECT)

GURTOVOY, L.Ye., prof.[deceased]; IVANITSKAYA, Ye.P., doktor med.
nauk; MAZHBITS, A.M., prof.; PREYSMAN, A.B., prof.;
STARTSEVA, L.N., kand. med. nauk; TRUYEV TSEVA, G.V., kand.
med.nauk; SHUB, R.L., zasl. deyatel' nauki Latviyskoy SSR
prof.; YAGUNOV, S.A., prof.[deceased]; PERSIANOV, L.S., prof.,
otv. red.; ZHMAKIN, K.N., prof., zasl. deyatel' nauki RSFSR,
red.; RYABOV, G.Z., red.; ROMANOVA, Z.A., tekhn. red.

[Multivolume manual on obstetrics and gynecology] Mnogotom-
noe rukovodstvo po akusherstvu i ginekologii. Moskva, Med-
giz. Vol.4. Book 1. [General gynecology] Obshchaya gineko-
logia. 1963. 674 p. (MIRA 16:9)

1. Chlen-korrespondent Akademii meditsinskikh nauk (for
Yagunov, Persianinov).

(GYNECOLOGY)

IVANITSKAYA, Ye.P.

"Effect of ionizing radiation on the sexual glands, pregnancy
and intrauterine fetus" by V.I.Bodiazhina, A.P.Kiriushchenkov,
M.N.Pobedinskii, N.M.Pobedinskii. Reviewed by E.P. Ivanitskaia.
Akush. i gin. 39 no.4:143 Jl-Ag'63 (MIRA 16:12)

/

IVANITSKAYA, Ye.P.; KHRUSHCHOV, M.M. (Moskva)

Role of radiotherapy in the surgical treatment of rectal cancer. Klin. med. 41 no.4:5-7 Ap '63. (MIRA 17:2)

1. Iz rentgenoterapevticheskogo otdela (zav. - starshiy nauchnyy sotrudnik I.A. Pereslegin) Gosudarstvennogo nauchno-issledovatel'skogo rentgeno-radiologicheskogo instituta Ministerstva zdravookhraneniya RSFSR.

IVANITSKIY, A., inzh.

Two suggestions by fitter M.Astashov. Stroitel' no.1:12 Ja '59.
(MIRA 12:3)
(Pumping machinery) (Electric cutouts)

GULYAYEV, P., doktor biolog. nauk; AYRAPETYANTS, M. kand.med.nauk;
IVANITSKIY, A., kand. med. nauk; SARADZHEV, N.; NOVAK, V., vrach;
MESSING, Vol'f

Thought transference. Tekh.mol. no.1:28-32 '61. (MIRA 14:3)

1. Zaveduyushchiy laboratoriyy fiziologicheskoy kibernetiki
Leningradskogo universiteta (for Gulyayev). 2. Institut vysshey
nervnoy deyatel'nosti Akademii nauk SSSR (for Ayrapetyants, Ivanit-
skiy). 3. Institut normal'noy i patologicheskoy fiziologii
Akademii meditsinskikh nauk SSSR (for Saradzhev).
(THOUGHT TRANSFERENCE)

KOZLOVA, A.V., prof., otv.red.; TROITSKIY, V.L., red.; KURLYANDSKAYA,
E.B., red.; BELOUSOV, A.P., red.; IVANITSKIY, A.F., red.;
GRODZENSKIY, D.E., red.izd-va; ASTAF'YEVA, G.A., tekhn.red.

[Medical radiology] Meditsinskaia radiologija. Moskva, Izd-vo
Akad.nauk SSSR, 1960. 400 p. (MIRA 13:4)

1. Vsesoyuznaya nauchno-tehnicheskaya konferentsiya po primene-
niyu radioaktivnykh i stabil'nykh izotopov i izluchaniy v narodnom
khozyaystve i nauke, Moscow, 1957.
2. Ministerstvo zdravookhraneniya
SSSR i Institut rentgenologii i radiologii RSFSR, Moskva (for Kozlova).
3. Institut gigiyeny truda i profzabolevanij Akademii meditsinskikh
nauk SSSR (for Kurlyandskaya).

(BIOLOGY, MEDICAL)

IVANITSKIY, A. M.

IVANITSKIY, A. M. -- "The Connection between the Development of the Functions and the Structure of the Cerebral Cortex during Ontogenesis." First Moscow Order of Lenin Medical Inst imeni I. M. Sechenov. Moscow, 1955. (Dissertation for the Degree of Candidate of Medical Sciences.)

SO: Knizhnaya Letopis', No 5, Moscow, Feb 1956

IVANITSKIY, A. M., Cand of Med Sci — (diss) "Comparative characteristics of the action of cardiac glycolyses during experimental arteriosclerosis." Moscow, 1957, 9 pp, (Second Moscow State Medical Institute im N. I. Pirogov), 200 copies (KL, 30-57, 112)

USSR/Human and Animal Physiology. Circulation

T-5

Abs Jour : Ref Zhur - Biol., No 14, 1958, No 65252

Author : Ivanitskiy A.M.

Inst

Title : A Method for Measuring the Blood Pressure of Rabbits in a Chronic Experiment.

Orig Pub : Farmakol. i toksikologiya, 1957, 20, No 1, 82-84

Abstract : The author presents a cage in which three rabbits can be kept during experiments associated with measurement of the pressure in the common carotid artery, which is kept exposed through the skin. Drawings and dimensions of the cage are given, and the method of measuring the blood pressure is described. The advantage of the method consists in the fact that the rabbits are in a natural condition---I.I. Sandalova

Card : 1/1

36

Ivanitskiy, A.M.

IVANITSKIY, A.M.

Comparative characteristics of cardiac glycosides in experimental atherosclerosis; author's abstract. Farm. i toks., 20 no.5:79-80 S-O '57. (MIRA 10:12)

1. Otdel farmakologii (zav. - prof. A.D.Turova) Vsesoyuznogo nauchno-issledovatel'skogo instituta lekarstvennykh i aromaticheskikh rasteniy.

(ARTERIOSCLEROSIS, experimental, eff. of cardiac glycosides, comparison of various prep. (Rus))

(CARDIAC GLYCOSIDES, effects, on exper. arteriosclerosis, comparison of various prep. (Rus))

IVANITSKIY, A. M.

"The Investigation of the Bioelectrical Activity of Animal Brains."

report presented at the Conference on Influence of Ionizing Radiation upon the Higher Developed Parts of the Central Nerve System, Inst. of Higher Nervous Activity, AS USSR, # .c-10 May 1958.

Ivanitsky A.M.

EXCERPTA MEDICA Sec 2 Vol 12/5 Physiology May 59

1887. RELATIONSHIP BETWEEN DEVELOPMENT OF FUNCTION AND STRUCTURE OF THE CEREBRAL CORTEX IN ONTOGENESIS. I. DEVELOPMENT OF CONDITIONED REFLEX ACTIVITY IN ONTOGENESIS IN RABBITS (Russian text) - Ivanitsky A.M. - BYULL. EKSPER. BIOL. I MED. 1958, 46/7 (27-30) Graphs 1 Illus. 2

It was established in experiments on rabbits that conditioned food reflexes to olfactory stimulation commence to develop from the very first day after birth. Conditioned food reflexes to tactile, thermal and sound stimulations develop from the 10th to 13th day. Reflexes to light stimulations begin to develop from the 13th to 15th day after birth. Conditioned defence reflexes to sound and light develop at the same periods as the conditioned food reflexes to these stimuli. (II, 1, 8*)

Chair Normal Physiol,

I. Moscow DL Med Inst im I. M. Sechenov

IVANITSKIY, A.M.

Relation between development of the structure and function of the cerebral cortex in ontogenesis. Report No.2: Histological differentiation of the cells of the cerebral cortex in rabbits in ontogenesis [with summary in English]. Biul.eksp.biol. i med. 46 no.8:118-125 Ag '58 (MIRA 11:10)

1. Iz kabineta morfologii mozga (zav. - prof. M.M. Aleksandrovskeya Instituta vysshoy nervnoy deyatel'nosti (dir. deystvitel'nyy chlen AMN SSSR A.G. Ivanov-Smolenskiy) AMN SSSR, Moskva. Predstavlena deystvitel'nym chlenom AMN SSSR S.A. Sarkisovym.
(CEREBRAL CORTEX, embryol.

histol. differentiation of cells of cerebral cortex
in rabbits (Rus))

IVANITSKIY, A.M. (Moskva)

Electroencephalographic analysis of some late sequelae of antenatal ionizing irradiation of animals [with summary in English].
Pat.fiziol. i eksp.terap. 3 no.1:21-26 Ja-P '59.

(MIRA 12:2)

1. Iz laboratorii radiobiologii (zav. - prof. I.A. Piontkovskiy)
Instituta vysshey nervnoy deyatel'nosti AN SSSR.

(FETUS, effect of radiations,
on postnatal EEG in animals (Rus))

(RADIATIONS, effects,
on fetus, postnatal EEG in animals (Rus))

(ELECTROENCEPHALOGRAPHY,
eff. of antenatal irradiation on postnatal
EEG in animals (Rus))

IVANITSKIY, A.M.

Results of the second conference on the effect of ionizing radiation
on the higher segments of the central nervous system. Pat.fiziol. i
eksp.terap. 3 no.1:93-94 Ja-F '59. (MIRA 12:2)
(RADIATION--PHYSIOLOGICAL EFFECT)

IVAN LIPSKY

Mechanism of vascular permeability disorders in rabbits
poisoned with tritium. Med.rad. 4 no.7:47-52 Jl '59.
(MIRA 12:9)

(TRITIUM tox.)
(BLOOD VESSELS radiations eff.)
(PERMEABILITY)

IVANITSKIY, A.M.

Use of the wedge-type colorimeter for fluorometry. Lab.delo 5
no.6:47-48 N-D '59. (MIRA 13:3)
(FLUORIMETRY)

IVANITSKIY, A.M.

Method for the investigation of pupillary reactions. Farm. i toks.
22 no. 6:568-569 N-D '59. (MIRA 13:5)
(PUPIL-EYE)

IVANITSKIY, A.M.

Morphological study of the development of the conditioned alimentary reaction in ontogenesis in rabbits. Trudy Inst. vys.nerv.deiat. Ser.fiziol. 4:126-140 '60. (MIRA 13:7)

1. Iz Kabineta morfologii mozga Instituta vysshey nervnoy deyatelnosti AN SSSR. Zaveduyushchiy kabinetom - M.M. Aleksandrovskaia.

(CONDITIONED RESPONSE) (CEREBRAL CORTEX)

IVANITSKIY, A.M. (Moskva)

Functions of the reticular formation of the brain stem. Pat.
fiziol.eksp.terap. 4 no.1:76-83 Ja-F '60. (MIRA 13:5)
(BRAIN physiol.)

IVANITSKIY, A.M. (Moskva)

Use of piezoelectric recorders for measuring arterial blood pressure in rabbits under long-term experimental conditions.
Pat.fizioli. i eksp.terap. 5 no.1:69-70 Ja-F '60. (MIRA 14:6)

1. Iz laboratorii radiobiologii (zav. - prof. I.A.Piontkovskiy)
Instituta vysshey nervnoy deyatel'nosti AN SSSR.
(BLOOD PRESSURE)

IVANITSKIY, A.M.

Pupillary reactions in rabbits injured by small quantities of
Sr 90. Biul. eksp. i biol. med. 50 no. 8:83-86 Ag '60.
(MIRA 13:10)

1. Predstavlena deystvitel'nym chlenom AMN SSSR V.V. Zakusovym.
(STRONTIUM-ISOTOPES) (RADIATION-PHYSIOLOGICAL EFFECT)
(PUPIL (EYE)) (REFLEXES)

87418
S/020/60/135/006/036/037
B016/B060

17.2400
21.6500

AUTHORS:

TITLE:

PERIODICALS:

Piontovskiy, I. A. and Ivanitskiy, A. M.
Hypertonic Syndrome in Animals Irradiated During the
Embryonic Time
Doklady Akademii nauk SSSR, 1960, Vol. 135, No. 6,
pp. 1554-1556

TEXT: The authors report on their experiments with the action of ionizing radiation (dose 300 - 400 r) on rabbit embryos on the 15th and 23rd day of embryogeny. As is known, the consequence is a lasting affection of the central nervous system leading to a hypertonic syndrome in grown-up of the animals. The authors wanted to study this syndrome in perturbations of the regulating functions, among other things, in irradiated rabbits and in control animals. Table 1 shows the average values of arterial pressure in animals in the middle of embryogeny (15th day) found that an irradiation deviation from the control animals. Animals of this group were divided

Card 1/3

Hypertonic Syndrome in Animals Irradiated
During the Embryonic Time

S/020/60/135/006/036/037
B016/B060

into three subgroups (age groups): a) the oldest (1.5 years), b) the middle (8-10 months), and c) the youngest (5-6 months). Hypertension was greatest in group a) and fairly stable (165-250 mm Hg). A tendency toward hypertension was marked in group b) also (155-200 mm Hg), but a considerable lability of the pressure height was observed here. Animals of group c) did not greatly deviate from normal state. Animals subjected to irradiation on the 23rd day of embryogeny were examined at the age of 1 - 3 years. They were found to have an unstable blood pressure. Although some of the animals exhibited a certain tendency toward hypertension, blood pressure was reduced in most of the rabbits, sometimes as far as 60 - 80 mm Hg (Fig. 1 b). These results are explained as follows: perturbations in the blood pressure were probably caused by a perturbation in the regulating activity on part of the higher vaso-motor centers; also the pituitary - adrenal glands system and kidneys may be involved in the process. Special experiments (with the use of electroencephalography) have shown that irradiation on the 15th day prevalently affects the trunk structures of the cerebrum, especially the function of the activating reticular system. Here are the regulating centers of blood pressure. Irradiation on the 23rd day particularly affects the cerebral cortex.

Card 2/3

87418

Hypertonic Syndrome in Animals Irradiated
During the Embryonic Time

S/020/60/135/006/036/037
B016/B060

A change in blood pressure is regulated by cortical mechanisms. The instability of arterial blood pressure observed on the group irradiated on the 23rd day is thought to be related to the disorganization of cortical centers. Summing up: the hypertonic disease, which is largely caused by hereditary factors, is shown on the basis of a described reproduction (irradiation on the 15th day of embryogeny) to be by all means usable as an experimental simulation of the clinical hypertonic disease. There are 1 figure and 12 references; 9 Soviet and 1 US.

ASSOCIATION: Institut vysshey nervnoy deyatel'nosti Akademii nauk SSSR
(Institute of Higher Nerve Function of the Academy of Sciences USSR)

PRESENTED: July 16, 1960, by V. N. Chernigovskiy, Academician

SUBMITTED: July 15, 1960

Card 3/3

S/636/61/000/000/009/013
D298/D303

AUTHOR: Ivanitskiy, A.M.

TITLE: A study of the inter-center relationships in the brain
of a rabbit, irradiated with X-rays during embryogenesis

SOURCE: Piontkovskiy, I.A., Vliyaniye ioniziruyushchego izlu-
cheniya na funktsiyu vysshikh otdelov tsentral'noy
nervnoy sistemy potomstva. Moscow, Medgiz, 1961, 141-155

TEXT: Electrophysiology tests of the higher central nervous system
were conducted on 27 rabbits. Of these, 9 were irradiated on the
15th and 8 on the 23rd day of embryogenesis with a 400 and 300 r
X-ray dose, respectively. 10 rabbits served as control. The PYM -3
(RUM-3) X-ray unit was used. An analysis of the obtained changes
in the sections of the central nervous system and their localiza-
tion, was carried out. The inter-center relationships were studied
by creating a certain reaction in the animal connected with the
simultaneous activity of the various brain structures, namely, the
"rousing" or "activation" reaction of the electroencephalogram

Card 1/3

A study of the inter-center ...

S/636/61/000/000/009/013
D298/D303

(Rheinberger, A. Jasper, 1937). The rousing reaction was caused by injecting adrenaline into the adult animal; the biocurrents were recorded with a 4-channel "Ediswan" electroencephalograph. The experimental results led to the following conclusions: 1) Intravenous injection of the adrenaline causes changes in the rabbit's encephalogram, typical of the "rousing reaction". 2) The reaction is expressed through the synchronization of the electroencephalogram of the visible region in the main rhythm. In the mobility region, both desynchronization as well as synchronization of the curve, are noted. 3) A significant increase of the adrenaline dose causes a drop or disappearance of the typical reactions, and in many cases, a shifting to spindle-like activity which, in turn, is explained by phenomena of excess inhibition. 4) There are significant individual differences in the adrenaline doses, causing threshold and excessive effects. An assumption is made that these differences depend on the different physiological strength of the reticular centers in the various animals. 5) The use of an adrenaline sample in animals, irradiated in the middle and late stages of embryogenesis, revealed a sharp sensitivity increase to the adrenalin-

Card 2/3

IVANITSKIY, A.M.

Use of the adrenaline test in electroencephalographic investigations performed with rabbits. Trudy Inst. vys. nerv. deiat. Ser. fiziol. 6:292-299 '61.
(MIRA 14:12)

1. Iz Laboratorii radiobiologii, zav. - I.A.Piontkovskiy.
(ELECTROENCEPHALOGRAPHY) (ADRENALINE)

27.2400

40661

S/241/62/007/007/004/006
I015/I215

AUTHOR: Ivanitskiy, A. M.

TITLE: Sensitivity of the organism to drugs during irradiation with Sr⁹⁰

PERIODICAL: Meditsinskaya radiologiya, v. 7, no. 7, 1962, 72-74

TEXT: The tolerance of an organism to drugs in radiation sickness has not been sufficiently studied. The experiments were performed on 180 (90 controls) albino rats weighing 170-200 g. A single intraperitoneal injection of 1.5 millicuries/kg b.w. of Sr⁹⁰ caused subacute radiation sickness. The tolerance of the animals to the following drugs was examined 2-3 weeks after the introduction of Sr⁹⁰: coffeein (20%), hexenal (5%), strychnin (0.1%), novocain (2%), cocaine (1%), curare (0.01%), ephedrin (5%), eserin (0.5%), atropin (5%), tetraethylammonium (2%), strophanthin (0.5%), cordiamine, calcium chloride (10%), mercusal, and sodium cyanide (0.1%). The lethal doses of these drugs were compared for irradiated and control animals. No significant differences in tolerance were found except for the decrease in resistance to hexenal. There is 1 table.

SUBMITTED: November 17, 1961

X

Card 1/1

AYRAPETYANTS, M.G.; IVANITSKIY, A.M.

"Effect of ionizing radiations on the nervous system" by A.V.
Lebedinskii, Z.N. Nachil'niitskaia. Reviewed by M.G. Airape-
tiants, A.N. Ivanitskii. Pat. fiziol. i eksp. terap. 7 no.2:
94-95 Mr-Ap'63. (MIRA 16:10)

(RADIATION-PHYSIOLOGICAL EFFECT)
(NERVOUS SYSTEM)

EVANITSKIY, A.M.

Toxicology of organic tin compounds; review of the literature.
Farm. i tek. 26 no.5628-632 S-0 '63. (MIRA 17:8)

IVANITSKIY, A.M.

Study of cortical and subcortical relations in reactive states
by means of electrophysiological methods. Probl. obshchei i
sud. psich. no.14:274-281 '63. (MIRA 18:9)

IVANITSKIY, A.M.; ZAKUTINSKIY, D.I., prof., nauchnyy rukovoditel' [deceased]

Use of the spirograph and artificial respiration apparatus under
experimental conditions. Farm. i toks. 27 no.1:102-104 Ju-F '64.
(MIRA 17:11)

FREYYEROV, O.Ye.; IVANITSKIY, A.M.

Results of a clinicophysiological study of effective pain
disorders in oligophrenia. Zhur. nevr. i psikh. 64 no.10;
1539-1546 '64. (MIRA 17:11)

1. Tsentral'nyy nauchno-issledovatel'skiy institut sudebnoy
psichiatrii im. Serbskogo (direktor - dotsent G.V. Morozev),
Moskva.

FELINSKAYA, N.I.; IVANITSKIY, A.M.

Mechanism of protective inhibition in reactive psychoses.
Zhur. nevr. i psikh. 64 no. 12:1852-1857 '64. (MIRA 18:1)

1. Tsentral'nyy nauchno-issledovatel'skiy institut sudebnoy
psichiatrii im. Serbskogo (direktor - dotsent G.V. Morozov).